SPACE

INIAP ARSAT-SG1 Communication Satellite



ARSAT-SG1, in addition to being the first high-performance satellite, will also become the first national satellite to operate a Ka-band payload and will have a traffic capacity of about 70 Gbps, particularly 50 Gbps in Argentina.

INVAP is ARSAT's main contractor for the provision of the satellite, that is based on the Small GEO family design incorporating state-of-the-art technologies for the platform and payload, such as full electric propulsion and high throughput system with multiple spot beams. This satellite will provide reliable and high-quality satellite broadband in rural areas with low population density where it is not convenient to deploy terrestrial infrastructure. It is estimated that more than 200 thousand households in Argentina and neighboring countries will be reached at affordable prices. In addition, it will be possible to extend the networks of mobile communication operators in rural areas as well.

Technical innovation

The new platform will incorporate the world's leading technology trends in the space telecommunications industry, such as full electric propulsion, both for raising the satellite from the transfer orbit to the geostationary orbit and for its maintenance at the location from which it operates.

Unlike satellites with traditional capacity, payloads with the new HTS (High Throughput Satellite) technology allow the reuse of frequencies with reduced coverage beams, multiplying the total capacity available on the satellite. ARSAT-SGI will have more than 40 beams, high spectral efficiency and good signal strength, which will allow greater data transfer. From the geostationary position 81° West, it will have coverage throughout the national territory and in the neighboring countries of Chile, Paraguay and Bolivia.

ARSAT-SG1 will weigh approximately 2,500 kg at launch. The electrical power available for the payload will be significantly higher than that of the two previously launched satellites ARSAT 1 and ARSAT 2. In addition, as with the previously mentioned satellites, the design lifetime of the ARSAT-SG1 will be 15 years.



ARSAT-SG1 track







MEDICAL SYSTEMS





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